

Docket No.: 490102001400

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Frederic M.A. COPPINGER et al.

Application No.: 10/649,007 Group Art Unit: Not Yet Assigned

Filed: August 26, 2003 Examiner: Not Yet Assigned

For: METHOD AND APPARATUS TO REDUCE

SECOND ORDER DISTORTION IN OPTICAL

COMMUNICATIONS

POWER OF ATTORNEY

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Harmonic Inc., assignee of the entire right title and interest in the above-identified application, submitted herewith, hereby appoints the members of the firm of Morrison & Foerster LLP, a firm composed of:

Lisa A. Amii	48,199	Carol M. Gruppi	37,341	James J. Mullen, III	44,957
Randolph Ted Apple	36,429	Alicia J. Hager	44,140	Kate H. Murashige	29,959
Mehran Arjomand	48,231	Johney U. Han	45,565	Martin Noonen	44,264
Shantanu Basu	43,318	Laurie L. Hill	51,804	Catherine M. Polizzi	40,130
Vincent J. Belusko	30,820	Douglas G. Hodder	41,840	Philip D. Reilly	41,415
Jonathan Bockman	45,640	Alan S. Hodes	38,185	James Remenick	36,902
Kimberly A. Bolin	44,546	Charles D. Holland	35,196	Robert A. Saltzberg	36,910
Barry E. Bretschneider	28,055	Arthur S. Hsieh	48,247	Robert E. Scheid	42,126
Nicholas S. Buffinger	39,124	Jill A. Jacobson	40,030	Debra A. Shetka	33,309
Robert K. Cerpa	39,933	Wayne C. Jaeschke, Jr.	38,503	Rebecca Shortle	47,083
Alex Chartove	31,942	Parisa Jorjani	46,813	J. David Smith	39,839
Peng Chen	43,543	Ararat Kapouytian	40,044	Kevin R. Spivak	43,148
Thomas E. Ciotti	21,013	Richard C. Kim	40,046	Shannon Thomas	52,285

Cara M. Coburn	46,631	Cameron A. King	41,897	Thomas L. Treffert	48,279
Raj S. Dave'	42,465	Norman R. Klivans	33,003	Brenda J. Wallach	45,193
Peter J. Davis	36,119	Glenn M. Kubota	44,197	Michael R. Ward	38,651
David L. Devernoe	50,128	Kawai Lau	44,461	E. Thomas Wheelock	28,825
Scott W. Doyle	39,176	Katherine D. Lee	44,865	Todd W. Wight	45,218
Stephen C. Durant	31,506	Otis Littlefield	48,751	Eric H. Witt	44,408
Christopher B. Eide	48,375	Hugh H. Matsubayashi	43,779	Timothy A. Worrall	54,552
Carolyn A. Favorito	39,183	Michael J. Mauriel	44,226	Bryan H. Wyman	48,049
David L. Fehrman	28,600	Mika Mayer	47,777	David Yang	44,415
Hector G. Gallegos	40,614	Robert S. McArthur	45,674	Peter J. Yim	44,417
Deborah S. Gladstein	43,636	Gladys H. Monroy	32,430	Karen Zachow	46,332
Debra J. Glaister	33,888	Scott C. Moore	52,047	Jie Zhou	52,395
Bruce D. Grant	47,608	Philip A. Morin	45,926		

as its attorneys with full power of substitution to prosecute this application and to transact all business in the Patent and Trademark Office in connection therewith.

The assignee certifies that it has reviewed the assignment and to the best of the assignee's knowledge and belief, title is in the assignee.

Please direct all correspondence regarding this application to the following:

10/9/02

Dated:

MORRISON & FOERSTER LLP

Attn: Norman R. Klivans

755 Page Mill Road

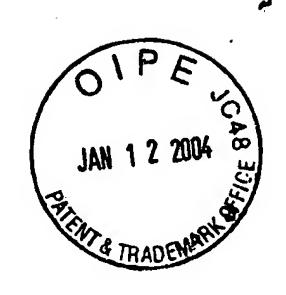
Palo Alto, California 94304 Telephone: (650) 813-5850

Fax: (650) 494-0792

For: Harmonic Inc.

Diane Georgi, Vice President and

General Counsel



DECLARATION FOR UTILITY PATENT APPLICATION

AS BELOW-NAMED INVENTORS, WE HEREBY DECLARE THAT:

Our residences, post office addresses, and citizenship are as stated below next to our names.

We believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled: METHOD AND APPARATUS TO REDUCE SECOND ORDER DISTORTION IN OPTICAL COMMUNICATIONS, the specification of which is attached hereto unless the following box is checked:

was filed on August 26, 2003 as United States Application Serial No. 10/649,007.

WE HEREBY STATE THAT WE HAVE REVIEWED AND UNDERSTAND THE CONTENTS OF THE ABOVE-IDENTIFIED SPECIFICATION, INCLUDING THE CLAIMS, AS AMENDED BY ANY AMENDMENT REFERRED TO ABOVE.

We acknowledge the duty to disclose information which is material to the patentability as defined in 37 C.F.R. § 1.56.

We hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed:

Application No.	Country	Date of Filing	Date of Filing Priority Cla	
			□Yes	□No

We hereby claim benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

Application Serial No.	Filing Date	

We hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, we acknowledge the duty to disclose information which is material to

patentability as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

Application Serial No.	Filing Date	Status	· · · · · · · · · · · · · · · · · · ·	
		□Patented	□Pending	□Abandoned

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Doto

Name:

Frederic M.A. COPPINGER

Residence:

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Citizenship:

France

Post Office Address: 2668 Briarwood Drive, San Jose, California 95125

10 /9 /03 Date

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LiPing CHEN

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Citizenship:

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Post Office Address: 935 Longwood Lane, San Jose, California 95129

10/9/03

Date

Name:

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PTO/SB/96 (05-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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STATEMENT UNDER 37 CFR 3.73(b)

Applica	ant/Patent Owner: Frederic M.A. COPPINGER et	al.	
Applicat	ation No./Patent No.: 10/649,007	Filed/Issue Date:	August 26, 2003
Entitled	METHOD AND APPARATUS TO REDUCE SE cd: COMMUNICATIONS	COND ORDER DISTO	PRTION IN OPTICAL
(Nom	Harmonic Inc. , a	corp	oration
}		Assignee, e.g., corporation, part	nership, university, government agency, etc.)
	that it is:		
1.	the assignee of the entire right, title, and interest	; or	
2.	an assignee of less than the entire right, title and The extent (by percentage) of its ownership inter		
in the pa	patent application/patent identified above by virtue of	either:	
A. [x]	An assignment from the inventor(s) of the patent a was recorded in the United States Patent and Trace. Frame, or for which a copy the	lemark Office at Reel	ied above. The assignment
OR	, or for which a copy the	acor is allacticu.	
B. []	A chain of title from the inventor(s), of the patent a assignee as shown below:	pplication/patent identif	ied above, to the current
	1. From:	To:	
	The document was recorded in the United State Reel , Frame	es Patent and Tradema , or for which a copy th	
	2. From:	To:	
	The document was recorded in the United State		rk Office at
	Reel , Frame	, or for which a copy th	nereof is attached.
	3. From:	To:	•
	The document was recorded in the United State Reel . Frame	s Patent and Tradema , or for which a copy th	
	[] Additional documents in the chain of title are lis		
[]	Copies of assignments or other documents in the one [NOTE: A separate copy (i.e., the original assignment) must be submitted to Assignment Divisional assignment is to be recorded in the records of the last contract the last cont	nent document or a true ion in accordance with	copy of the original 37 CFR Part 3, if the
The und	ndersigned (whose title is supplied below) is authorize	ed to act on behalf of th	e assignee.
		Diane (
	Date	Typed or pri	nted name .
	(408) 542-2500 Telephone Number	Signal Signal	lu 10/9/03
	reiephone radinael	Signa Vice President and	
		Titl	

Attorney Docket No.: 490102001400



ASSIGNMENT JOINT

THIS ASSIGNMENT, by Frederic M.A. COPPINGER, LiPing CHEN and David PIEHLER (hereinafter referred to as the assignors), residing at 2668 Briarwood Drive, San Jose, California 95125, 935 Longwood Lane, San Jose, California 95129, and 127 Lewis Avenue, Half Moon Bay, California 94019, respectively, witnesseth:

WHEREAS, said assignors have invented certain new and useful improvements in METHOD AND APPARATUS TO REDUCE SECOND ORDER DISTORTION IN OPTICAL COMMUNICATIONS, set forth in an application for Letters Patent of the United States, bearing Serial No. 10/649,007 and filed on August 26, 2003; and

WHEREAS, Harmonic Inc., a corporation duly organized under and pursuant to the laws of Delaware and having its principal place of business at 549 Baltic Way, Sunnyvale, California 94089-1140 (hereinafter referred to as the assignee) is desirous of acquiring the entire right, title and interest in and to said inventions and said application for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon:

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, said assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto said assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by said assignee, for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the assignors, had this sale and assignment not been made.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, said assignors are the sole and lawful owners of the entire right, title and interest in and to said inventions and the application for Letters Patent above-mentioned, and that the same are unencumbered and that said assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that said assignors will, whenever counsel of said assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said inventions in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said inventions, without charge to said assignee, its successors, legal representatives and assigns, but at the cost and expense of said assignee, its successors, legal representatives and assigns.

AND said assignors hereby request the Commissioner of Patents to issue said Letters Patent of the United States to said assignee as the assignee of said inventions and the Letters Patent to be issued thereon for the sole use of said assignee, its successors, legal representatives and assigns.

10/103	Fred	Conjumoner.	
Date	Frederic M.A. C	OPPINGER	
STATE OF Califo	Rnia)	•
COUNTY OF Santa	Clara) ss.)	

, -	(AB)		Attorney Docket No.:	19 0102001400
On October 9 20 appeared Frederic M.A.	903, before me, the the Coppinger	undersigned notary public	in and for said County an	d State, personally
	personally knows	n to me [or] the basis of satisfactory ev	idence	
to be the person(s) whose name(s)	is	subscribed to the within	instrument and acknowle	edged to me that
he executed the	same inhi_	authorized	capacity(ico) and that, by	his
signature(9) on the instrument, the				
WITNESS my hand and official sea	a1			
LALIRIE BATCH Commission # 1 Notary Public - C Santa Clara C My Comm. Expises	ELOR 423502 California County	My commission July 5	•	
10/9/03	CHEN	Man		
STATE OF <u>California</u> COUNTY OF <u>Sonta Clare</u>) ss. 03 JB			
On Vetober 9	002, before me, the	undersigned notary public	in and for said County an	d State, personally
appeared <u>Li Ping</u> Che	<u>n</u>			
	personally known proved to me on	n to me <i>[or]</i> the basis of satisfactory ev	idence	
to be the person(s) whose name(s). he executed the	is same in hi	subscribed to the within	instrument and acknowle capacity(ics) and that, by	edged to me that
signature(s) on the instrument, the	person(s) or the entit	ty(ies) upon behalf of whic	th the person(s) acted exe	cuted the instrument
WITNESS my hand and official se	al.			
		Jamos	Batchelor	
LAURIE M	VICHELOR 1423502			
Notary Public	c - Callornia	My commission	-	
Santa Cla My Comm. Exp	400 Jul 5, 2007	July 5	2007	

Attorney Docket No.: 490102001400

10 /9 /03 Date	David PIEHLER	A. A.			
STATE OF Culifornia COUNTY OF Santa On October 9 appeared David	Clara 2003 AS , 2002, before r	ne, the undersign	ed notary public in and for	said County and State	, personally
to be the person (a Vyy) become	proved to		of satisfactory evidence		
he ex	ecuted the same in	his	bed to the within instrument authorized capacity(id	and that, by he	5
WITNESS my hand and o	RE NARCHELOR Nittion # 1423502 Public - Collomia		Jaure Bate My commission expires on Tuly 5, 200	helon	he instrument.